

High Voltage Delivery Service Credit Computation (REVISED)  
Marginal Cost-Based Analysis

Customers At or Above 69,000 Volts

Cost to Serve (\$/kW):

$$Y = (2176.7 \times X^{-0.8102}) \text{ \$/kW}$$

See p. 2 of this Attachment B (fitted curve)

Cost to Serve (area under the curve in MW-\$/kW):

$$\int Y = \int \{2176.7 \times X^{-0.8102}\}$$
$$\int Y = \{2176.7 \times X^{(-0.8102 + 1)}\} \div \{-0.8102 + 1\}$$

Area from 0.1 MW to 95.4 MW = 19,832.8 (MW-\$/kW)

Customers Below 69,000 Volts

Cost to Serve (\$/kW):

$$Y = \$409.58 / \text{kW}$$

See p. 3 of this Attachment B (weighted average cost)

Cost to Serve (area under weighted average cost line in MW-\$/kW):

$$\int Y = \int 409.58$$
$$\int Y = 409.58 \times X$$

Area from 0.1 MW to 95.4 MW = 39,033.0 (MW-\$/kW)

Credit Computation:

$$\begin{aligned} \text{Credit Area} &= 39,033.0 \text{ (MW-}\$/\text{kW)} - 19,832.8 \text{ (MW-}\$/\text{kW)} \\ &= 19,200.2 \text{ (MW-}\$/\text{kW)} \end{aligned}$$

$$\begin{aligned} \text{X-axis Length} &= 95.4 \text{ MW} - 0.1 \text{ MW} \\ &= 95.3 \text{ MW} \end{aligned}$$

$$\begin{aligned} \text{Y-axis Length} &= \text{Credit Area} \div \text{X-axis Length} \\ &= 19,200.2 \text{ (MW-}\$/\text{kW)} \div 95.3 \text{ MW} \\ &= \$201.47 / \text{kW} \end{aligned}$$

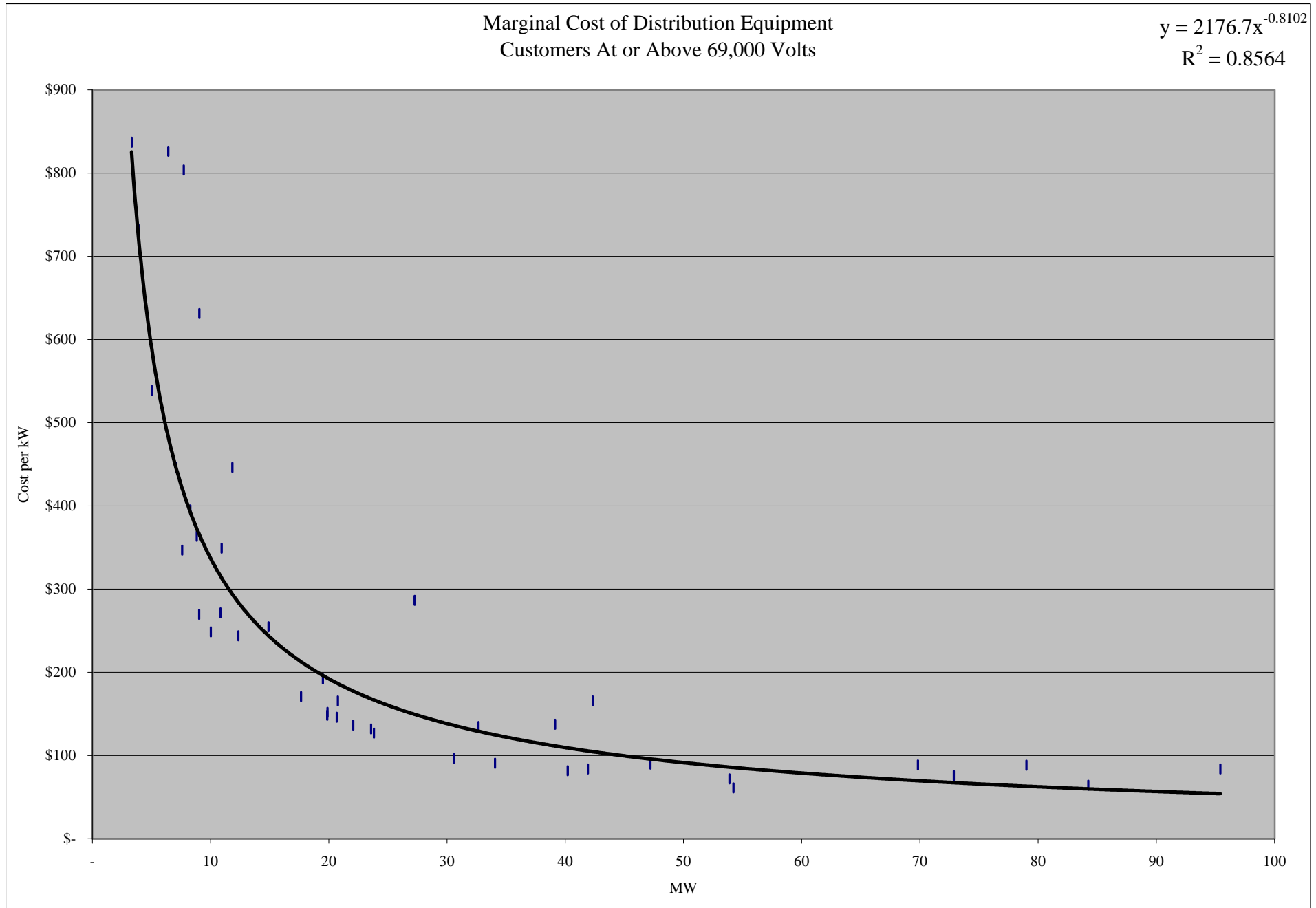
$$\begin{aligned} \text{Add General Plant at 7.8\%:} \\ &= (\$201.47 / \text{kW}) \times 1.078 \\ &= \$217.19 / \text{kW} \end{aligned}$$

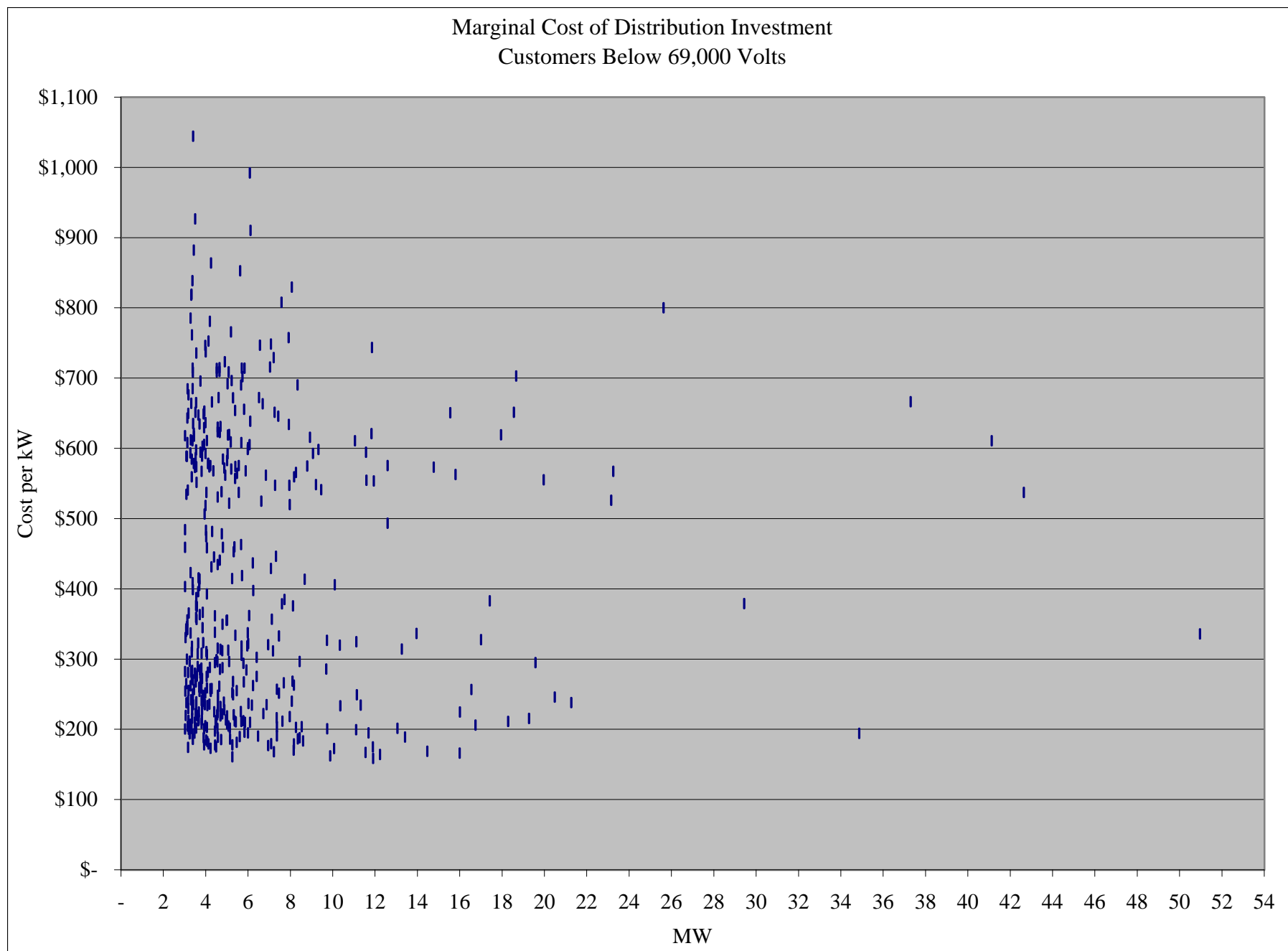
See ComEd Exhibit 13.1 at p. 44

$$\begin{aligned} \text{Determine Annual Marginal Revenue Requirement (ALPCC = 0.1174):} \\ &= \$217.19 / \text{kW} \times 0.1174 \\ &= \$25.50 / \text{kW} \end{aligned}$$

See ComEd Exhibit 13.1 at p. 44

$$\begin{aligned} \text{Determine Marginal Monthly Credit:} \\ &= \{\$25.50 / \text{kW}\} \div 12 \\ &= \$2.12 / \text{kW} \end{aligned}$$





Customers with demands at or above 3 MW  
Weighted average cost: \$409.58/kW